

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (cancelled)

Claim 2 (cancelled)

Claim 3 (cancelled)

Claim 4 (cancelled)

Claim 5 (currently amended): A method for controlling the pressure of gas from a gas reservoir using ~~provided from~~ a regulated gas supply system comprising the steps of:

- a) providing a body defining ~~a gas reservoir and~~ a piston chamber connected to the ~~[[, said]] gas reservoir connected to said piston chamber~~ by a channel, said piston chamber having an uppermost surface, a seat, and a chamber wall connecting said uppermost surface with said seat;
- b) ~~providing a piston in said piston chamber, said piston having a first end, a second end, and a piston flange, said piston flange contacting said chamber wall;~~
- b) e) urging a said piston in said piston chamber away from said seat with a spring;
- c) d) releasing gas from the said gas reservoir into said piston chamber, said gas flowing through a piston channel through said piston; and

- d) applying a pressurized force on said piston flange opposite said spring; and
- e) forcing said piston into contact with said seat of said piston chamber to obstruct the flow of the gas through said piston channel;
- f) providing a secondary chamber and a central channel traversing said piston from a first end of said piston to a second end of said piston;
- g) engaging said secondary chamber with a first end of said piston;
- h) distributing gas through said central channel into said secondary chamber to balance said piston
- i) exerting said gas from said body through a gas outlet.

Claim 6 (cancelled)

Claim 7 (cancelled)

Claim 8 (cancelled)

Claim 9 (cancelled)

Claim 10 (cancelled)

Claim 11 (cancelled)

Claim 12 (new): A regulated gas supply system for regulating the distribution of a highly pressurized gas to a desired pressure comprising:

a body defining a gas inlet to receive a highly pressured gas and a gas outlet to distribute a regulated gas;

a piston chamber defined in said body;

a secondary chamber defined in said body;

a piston slidably positioned in said piston chamber, said piston having a piston channel traversing said piston and a piston extension to slidably engage said secondary chamber;

a spring biasing said piston within said piston chamber, and

a central channel extending through said piston and said piston extension.

Claim 13 (new): The regulated gas supply system of claim 12 further comprising a vent aperture through said body, said vent aperture proximate said spring.

Claim 14 (new): The regulated gas supply system as described in claim 12 wherein said piston chamber comprises:

an uppermost surface;

a seat opposing said uppermost surface; and

a chamber wall between said uppermost surface and said seat.

Claim 15 (new): The regulated gas supply system as described in claim 14 wherein said piston comprises:

a piston body, wherein said piston channel traverses said piston body; and

a piston flange abutting said piston body, said piston flange engaging said chamber wall.

Claim 16 (new): The gas regulating assembly of claim 15, wherein said spring is positioned between said piston flange and said seat to urge said piston flange away from said seat.

Claim 17 (new): A gas regulator for receiving a highly pressurized gas from a gas source and distributing the gas at a desired pressure, said regulator comprising:

a housing having an gas inlet and a gas outlet;

a piston chamber defined in said housing between said gas inlet and said gas outlet, said piston chamber including an uppermost surface, a seat opposing said uppermost surface, and a chamber wall connecting said uppermost surface with said seat;

a secondary chamber defined in said housing;

a piston slidably positioned in said piston chamber, said piston having a piston body with an abutting flange engaging said chamber wall, a piston channel traversing said piston body, a piston extension extending from said piston body to engage said secondary chamber, and a central channel traversing said piston; and

resilient means for urging said piston flange away from said seat, said resilient means positioned between said piston flange and said seat.

Claim 18 (new): The regulator as described in claim 17, wherein said resilient means comprises a spring.

Application No. 10/631,276
Amend. dated June 23, 2004
Reply to Office Action of Feb. 23, 2004

Amendments to the Drawings

The attached sheets of drawings include changes to Figures 1 and 2.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes